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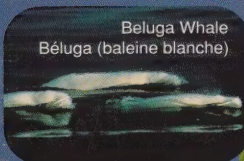


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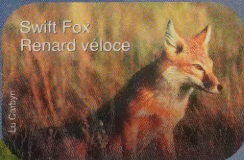
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Beluga Whale
Béluga (baleine blanche)



Swift Fox
Renard vélocé



Peregrine Falcon
Faucon pèlerin



Burrowing Owl
Cheveche des terriers



Nuttall's Cottontail
Lapin de Nuttall



Vancouver
Island Marmot
Marmotte de
l'île Vancouver



American Marten
(Newfoundland population)
Marte d'Amérique
(Population de Terre-Neuve)



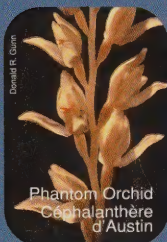
Giant Helleborine
Épipactis géant



Pink Coreopsis
Coréopsis rose



Phantom Orchid
Céchalanthère
d'Austin



Wood Turtle
Tortue des bois



Whooping Crane
Grue blanche



Harlequin Duck
Arlequin plongeur



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Canada's Strategy
to Protect Species
at Risk

La Stratégie canadienne
pour la protection des espèces
en péril

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We lose things every day...

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Like mittens, shoes, toys or glasses. These are things we may find again, and if not, we can replace them. But we are in danger of losing animals, plants and insects that we can't replace. EVER.

That is because some species are threatened with extinction. Right now, in Canada, there are 328 species that, without our help, could disappear forever. Twelve species are already extinct – gone forever. Fifteen more are no longer found in the wild in Canada, but survive elsewhere. Wildlife species need special places to live, called habitat. When we destroy or change habitat, we put species in danger because they may no longer have a place to live. Growing cities, pollution, alien species, illegal hunting, and development activities like mining, forestry and intensive agriculture can all change or destroy habitat if we're not careful. It's not too late, though. Canadians are helping to save many species, including the Whooping Crane, the Peregrine Falcon, the Wood Bison and the Swift Fox.

Here are some examples of species at risk that are found in a variety of habitats in Canada.

We need to work toward saving species, so you, your family and friends can enjoy them, now and in the future. They're our responsibility.

Vancouver Island Marmot

Status: Endangered
Habitat: Sub-alpine meadow on Vancouver Island

This marmot is one of the rarest mammals in the world and is found only on Vancouver Island. There are fewer than 100 Vancouver Island Marmots left. Marmots occupy sub-alpine meadow habitat and live in burrows where they hibernate for seven months of the year. Adults are about the size of a large house cat, with thick brown fur and a white muzzle. Clearcut logging has reduced survival, altered natural movement patterns and made these marmots more vulnerable to predators and disease. Scientists believe that recovery is possible because of the availability of natural undisturbed habitat.

Black-footed Ferret

Status: Extirpated (no longer found in the wild in Canada)
Habitat: Prairie grasslands

These weasel-like carnivores used to be common on the prairies. They are the only ferrets native to North America, and were believed to be extinct until a small group was found in the United States in 1981. The Black-footed Ferret almost disappeared because farmers poisoned the Prairie Dog, the ferret's food source, to protect their crops. Ferrets are being raised in captivity in Canada and the United States, and are being reintroduced in the United States.



Harbour Seal (Lacs des Loups marins population)

Status: Vulnerable
Habitat: Freshwater lakes east of Hudson Bay

Little is known about this rare seal subspecies that lives only in a group of lakes in northern Quebec, near Hudson Bay. It is one of only two seal subspecies in the world known to live in freshwater year round. Because only about 100 to 600 seals exist in such a small area, scientists worry that a natural disaster, or any human activity such as the building of a hydroelectric dam, could drive them toward extinction.



Harlequin Duck (Eastern population)

Status: Endangered
Habitat: Fast running waters in Eastern Canada

The mouse-like squeak of Harlequin ducks – sometimes called "sea mice" or "squeakers" – used to be common along both the Pacific and Atlantic coasts in winter. While there are still many on the Pacific coast, fewer than 1,500 ducks remain in Eastern Canada. Oil spills, damming of fast-running streams where they breed, and illegal hunting have put the Harlequin duck in danger of disappearing.



Blue Racer Snake

Status: Endangered
Habitat: Southern Ontario prairies

In Canada, you'll find this speedy snake only on Southern Ontario's Pelee Island. The Racer is one of the world's fastest snakes, and may grow as long as two metres. The Racer is not poisonous. It kills its prey by grabbing and swallowing it whole. About 300 Blue Racer Snakes remain in Canada and are threatened by human disturbances like cottage building. Some snakes are also killed on purpose.



Pitcher's Thistle

Status: Endangered
Habitat: Sand dunes

This tough but pretty plant, which is the official flower of Scotland, grows along the beaches of the Great Lakes. The plant is important as a nectar source for many insects. Many people accidentally trample on the plant, not realizing it's so rare. White-tailed deer often snack on the leaves and small, pink flowers of the Pitcher's Thistle.



Monarch Butterfly

Status: Vulnerable
Habitat: Places with milkweed/grassland

In summer, you can find Monarchs in all provinces, but by fall they begin heading south. Millions migrate to Mexico and California, where they spend winters in small areas that are exposed to habitat loss. Protection of the Monarch has become an international effort. In Canada, important migration stopover areas are already protected.



Nooksack Dace

Status: Endangered
Habitat: Fast moving creeks

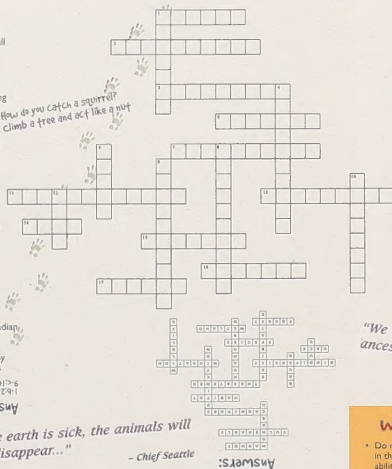
This hand-sized fish is left over from the last ice age. In Canada, you'll find it only in the fast moving waters of four streams in British Columbia's Fraser Valley. Scientists believe it's disappearing because of water pollution and construction as Vancouver's suburbs expand.



TRIVIA QUIZ

- Why do Monarch Butterflies fly south for the winter?
 - To go to Disney World
 - To escape the cold
 - Changing wind patterns
- Which bird has been saved from extinction in Canada (so far)?
 - Daffy Duck
 - The Passenger Pigeon
 - The Peregrine Falcon
- In which province can the Vancouver Island Marmot be found?
 - British Columbia
 - Vancouver Island
 - Alberta
- What is the biggest threat to wildlife?
 - Cars
 - Loss of habitat
 - Heavy metal music
- How many species of wildlife are currently known to be at risk in Canada?
 - 1,581
 - 37
 - 297
- How many animals are left if a species is extinct?
 - Less than 50 in the world
 - None in Canada
 - None at all
- What is the Nooksack Dace?
 - A fish
 - A famous West Coast hiking trail
 - A river from the ice age
- The Pitcher's Thistle is the official flower of:
 - The Great Lakes
 - Major League baseball
 - Scotland
- Why are wetlands important?
 - Swimming and boating
 - Hydroelectricity
 - Their biodiversity
- Which of the following form part of an ecosystem?
 - Animals
 - Plants
 - Rocks
 - All of the above
- On which ocean is the Harlequin Duck still plentiful?
 - Atlantic
 - Pacific
 - Arctic
- What does extirpated mean?
 - Gone from the Canadian wild
 - Upset
 - Found in Canada only during warm months

Complete the puzzle below using the clues provided:



Across

- Rare west coast mammal
- A species that is sensitive to human activity
- A meat-eater
- Natural home of a plant or animal
- A species likely to become endangered if no action is taken
- Short for "biological diversity"
- What geese and Monarch butterflies do each fall
- Fraser Valley stream swimmer
- Animals, plants or micro-organisms that are similar and are able to reproduce
- Marsh, bog, swamp, etc.
- This animal roams the Prairies

Down

- Colonial butterfly that migrates to Mexico
- When this happens, a species is gone forever
- Pelee Island snake
- At risk of becoming extinct
- A species that is no longer found in the wild in Canada, but exists elsewhere
- Wild animals or plants
- This Harlequin is also known as a "sea mouse"

"We do not inherit the Earth from our ancestors, we borrow it from our children."

- Native American saying

Answers:

"When the earth is sick, the animals will begin to disappear..."

- Chief Seattle

Answers:

SPECIES AT RISK IN CANADA (1999)

Status	Terrestrial		Marine		Amphibians & Reptiles		Molluscs	Lepidoptera (Butterflies & Moths)		Plants	Lichens & Mosses		TOTALS
	Birds	Mammals	Mammals	Fish									
Extinct	3	2	1	4	0	1	0	0	0	0	0	0	12
Extirpated	3	2	2	1	1	1	3	2	9	15			15
Endangered	18	6	6	4	7	4	1	40	1	87			87
Threatened	7	5	5	18	7	3	0	30	1	75			75
Vulnerable	31	19	8	42	17	0	1	39	3	151			151
TOTALS	52	33	22	72	32	8	5	111	5	340*			

* This number includes the twelve species that are already extinct.

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GLOSSARY

- Biodiversity:** This means the variety of life on earth and is short for biological diversity.
- Ecosystem:** All the living and non-living things in a certain area including air, soil, water, animals and humans. A lake is an example of an aquatic ecosystem.
- Endangered:** When a population of plants or animals is so small, it's at risk of becoming extinct.
- Extinct:** If this happens, a species is gone forever.
- Extirpated:** A species that no longer exists in the wild in Canada, but is found elsewhere (in another country, or a zoo, for example).
- Habitat:** The natural home of a plant or animal.
- Migrate:** When animals travel to a different area because of temperature changes or to find food. For example, geese and Monarch butterflies migrate every fall and spring.
- Pesticides:** Substances used for destroying pests such as insects.
- Species:** Animals, plants or micro-organisms that are so similar that they are able to have offspring.
- Sustainable:** Using a natural resource in a responsible way, so it will be available in the future. For example, ensuring that new trees grow in areas where older ones have been cut down.
- Threatened:** A species likely to become endangered, if we do not take steps to protect it soon.
- Vulnerable:** A species of special concern because it is especially sensitive to human activity or natural events.
- Wetlands:** Places where land and water meet or where the ground is wet for most or all of the year. Some examples include marshes, swamps and bogs.
- Wildlife:** Animals or plants not domesticated or cultivated by humans.

SPECIES AND THEIR HABITAT

Following the example given, match these species to their habitat (the place where they live):

- | | |
|-------------------------|---------------------------------------|
| Monarch Butterfly | Fast moving creeks |
| Black-Footed Ferret | Sub-alpine meadow on Vancouver Island |
| Harlequin Duck | Southern Ontario prairies |
| Pitcher's Thistle | Fast moving streams and rivers |
| Nooksack Dace | Places with milkweed/grass land |
| Harbour Seal | Sand dunes |
| Vancouver Island Marmot | Prairie grasslands |
| Blue Racer Snake | Freshwater lakes east of Hudson Bay |

What do cats put in their drinks to keep them cool?
Nice cubes

Answers:



Harlequin Duck

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The Species at Risk Web Site

provides lots of
information on
Canada's species
at risk and their
recovery.



This web site is a partnership
effort of the Canadian Wildlife
Federation, Environment Canada,
Natural Resources Canada and
the Canadian Museum of Nature.

www.speciesatrisk.gc.ca



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de la faune



L'Arlequin plongeur

Le site web des espèces en péril au Canada

vous procure une
multitude de ren-
seignements sur
les espèces en péril
et les actions entre-
prises pour leur
rétablissement.

Ce site web est le résultat
d'un partenariat impliquant
Environnement Canada, la
Fédération canadienne de la
faune, Ressources naturelles
Canada et le Musée canadien
de la nature.

www.especesenperil.gc.ca



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THE ENDANGERED WHOOPING CRANE

LA GRUE BLANCHE EN DANGER DE DISPARITION

SPECIES at RISK ESPÈCES en PÉRIL



Photo: Brian Johns, CWS/SCF



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16 Whooping Cranes in 1941, 185 in 1999 ~ 16 Grues blanches en 1941, 185 en 1999

Canada

The Endangered Whooping Crane

A long road to recovery



Photo: Brian Johns, CWS

The plight of the endangered whooping crane has engaged the hearts and minds of conservationists for decades. Careful management of the last 16 migratory whooping cranes that remained in 1941 has given hope that this magnificent white bird will continue to grace our northern skies. From a shaky beginning, the wild flock has grown to over 180 cranes that migrate between breeding grounds in Wood Buffalo National Park and wintering grounds in Aransas, Texas. A non-migratory flock of over 70 cranes has also been established in Florida.

Whooping cranes have probably never been numerous. Although their breeding range in the nineteenth century extended from the Northwest Territories to central Iowa and Illinois, there were only about 1500 birds in the late 1800s. Loss of breeding habitat as human settlement spread westward, with some shooting and egg collection, contributed to the severe decline of this species. Whooping cranes have been protected from killing by law since 1917, but natural hazards persist. Power lines, microwave towers and other structures pose threats to flying cranes. During the breeding season, a drought or severe storm could destroy eggs and new-born chicks. In their wintering range in coastal Texas, concern exists about ship traffic and the possibility of an oil or chemical spill and the effects of shoreline erosion on crane habitat.

Bringing the whooping crane back from the brink of extinction has been the goal of numerous concerned individuals and organizations in Canada and the United States. Leading the charge have been two federal wildlife organizations: the U.S. Fish and Wildlife Service of the Department of the Interior, and the Canadian Wildlife Service (CWS) of Environment Canada. Their efforts have included sharing data and expertise, working together on captive-breeding and reintroduction programs, and establishing a joint Recovery Team.

Back From the Brink

The story of the whooping crane rescue begins in 1954, when the breeding grounds of the last whooping cranes in the world were discovered in northern Wood Buffalo National Park, making captive-rearing of cranes a possibility. In early June 1967, a team of Canadian and U.S. scientists took six eggs from Wood Buffalo National Park nests (one egg from each clutch of two eggs) for artificial incubation. A CWS biologist waded through the marshes to collect the eggs, which were then placed in a special portable incubator, heated by hot water bottles, and flown to the Patuxent Wildlife Research Center in Maryland. Between 1967 and 1996, 240 whooping crane eggs were collected with the intention of establishing a captive flock for breeding and eventually releasing offspring to bolster the wild population. This proved to be quite a challenge, as the cranes were difficult to breed in captivity and were prone to disease.

The nest disturbance did not deter the adult wild whooping cranes from successfully hatching their remaining egg. In the wild, a pair usually has two eggs, from which only one chick usually survives. By ensuring one viable egg remains in each nest after the removal of surplus eggs (this is done by testing the eggs at the nest and replacing dead eggs with living ones), the scientists may have actually increased hatching success. Since the egg collections began in 1967, the Wood Buffalo/Aransas population has increased from 43 to 185 birds (1999 estimate). Since 1993, 175 captive-bred whooping cranes have been released into the wild in Florida, to establish a non-migratory population currently numbering about 73 birds.

Future Plans

The U.S./Canada recovery plan for the whooping crane calls for a minimum of 40 breeding pairs in the Wood Buffalo/Aransas population, and the establishment of two additional wild populations, each with at least 25 breeding pairs. The first goal has now been achieved, since there were 48 pairs breeding in Wood Buffalo National Park in 1999. The wild population established in Florida needs to be brought up to at least 100 individuals and to have successful breeding. In 1999 there were 2 pairs that laid eggs, however neither nest hatched, due to predation and flooding. The possibility of establishing a second wild flock, a migratory one with breeding grounds in Wisconsin, is being investigated. Scientists on both sides of the border are experimenting with the use of trucks and ultra-light planes to teach captive-bred cranes the migratory behaviour they would normally learn from their parents.

To report sightings,
or obtain more
information

A network of enthusiasts throughout Canada and the United States report sightings of whooping cranes each spring and fall along the migration route, helping officials keep track of crane numbers. The Canadian phone number is 306.975.5595. In the United States, sightings in Texas may be reported to 361.286.3559, and sightings in other states to 308.382.6468.

For more information on the Recovery of Species at Risk, please call

1.800.668.6767

or visit our web site at

www.cws-ccf.ec.gc.ca/sara

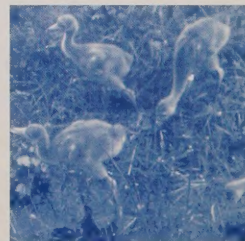


Photo: Kent Clegg

La Grue blanche en danger de disparition

Une longue route vers le rétablissement

La situation critique de la Grue blanche en danger de disparition occupe le cœur et l'esprit des protecteurs de l'environnement depuis des décennies. Une gestion prudente des 16 dernières Grues blanches migratrices encore en vie en 1941 a permis d'espérer que ce magnifique oiseau blanc puisse continuer d'embellir notre ciel septentrional. Alors qu'elle a connu un début difficile, la population sauvage a augmenté jusqu'à plus de 180 Grues qui migrent entre des sites de reproduction situés dans le parc national Wood Buffalo et des aires d'hivernage situées à Aransas au Texas. Une population sédentaire comptant plus de 70 Grues a également été établie en Floride.

Les Grues blanches n'ont probablement jamais été nombreuses. Bien que leurs aires de reproduction se soient étendues des Territoires du Nord-Ouest jusqu'au centre de l'Iowa et en Illinois au cours du dix-neuvième siècle, on ne comptait qu'environ 1500 oiseaux à la fin des années 1800. La perte d'habitats de reproduction lorsque les humains se sont dispersés vers l'ouest, ainsi que la collecte des oeufs et la chasse, ont contribué au grave déclin de cette espèce. La loi interdit de chasser les Grues blanches depuis 1917, mais les risques naturels persistent. Les lignes de transport d'électricité, les pylônes à micro-ondes et d'autres structures présentent un danger pour les Grues en vol. Durant la saison de reproduction, une sécheresse ou une sévère tempête pourrait détruire les oeufs et les oisillons nouveaux-nés. Quant à leurs aires de reproduction situées sur la côte du Texas, des inquiétudes se font sentir relativement au trafic maritime et à la possibilité d'un déversement de pétrole ou de produits chimiques, ainsi qu'aux effets de l'érosion des rivages sur l'habitat de la Grue.

Le rétablissement de la Grue blanche alors qu'elle était presque disparue a été le but de nombreuses personnes et de nombreux organismes préoccupés par le sort de cet oiseau au Canada et aux États-Unis. À leur tête se trouvent deux organismes fédéraux de la faune : le United States Fish and Wildlife Service du Department of the Interior et le Service canadien de la faune (SCF) d'Environnement Canada. Leurs efforts ont compris le partage des données et des connaissances spécialisées, la collaboration au niveau des programmes de reproduction en captivité et de réintroduction ainsi que la mise sur pied d'une équipe conjointe de rétablissement.

Sauvée de justesse

L'histoire du rétablissement de la Grue blanche débute en 1954, lorsque les aires de reproduction des dernières Grues blanches au monde ont été découvertes dans le nord du parc national Wood Buffalo, rendant l'élevage des Grues possible. Au début du mois de juin 1967, une équipe de scientifiques canadiens et américains a pris six oeufs dans les nids du parc national Wood Buffalo, soit un œuf de chaque ponte de deux oeufs, pour l'incubation artificielle. Un biologiste du SCF a patrouillé dans les marais afin de recueillir les oeufs, qui ont par la suite été placés dans un incubateur spécial portable, chauffé à l'aide de bouteilles d'eau chaude, et acheminé par avion au Patuxent Wildlife Research Center situé dans le Maryland. Entre 1967 et 1996, 240 oeufs de Grues blanches ont été recueillis dans le but d'établir une bande en captivité aux fins de reproduction et de relâcher à la longue une descendance afin de renforcer la population sauvage. Cela s'est avéré un défi de taille, car il était difficile de faire l'élevage des Grues en captivité, et celles-ci étaient sujettes à la maladie.

La perturbation du nid n'a pas empêché les Grues blanches adultes de couvrir l'œuf restant jusqu'à éclosion. Dans la nature, un couple a en général deux oeufs, desquels seulement un oisillon survit. En s'assurant qu'un œuf viable soit demeuré dans chaque nid après la prise des oeufs en trop (réalisé en examinant les oeufs dans le nid même et en remplaçant les oeufs morts par des vivants), les scientifiques pourraient en réalité avoir augmenté le taux de succès d'éclosion. Depuis le commencement de la collecte d'oeufs en 1967, la population de Wood Buffalo et d'Aransas est passée de 43 à 185 individus (estimation de 1999). Depuis 1993, 175 Grues blanches nées en captivité ont été relâchées dans la nature en Floride, afin d'établir une population sédentaire comptant actuellement environ 73 individus.

Plans futurs

Le plan de rétablissement États-Unis-Canada pour la Grue blanche nécessite un minimum de 40 couples reproducteurs dans la population du parc national Wood Buffalo et d'Aransas, ainsi que l'établissement de deux populations sauvages supplémentaires, chacune comptant au moins 25 couples reproducteurs. Le but premier a déjà été atteint, étant donné qu'il y avait 48 couples reproducteurs dans le parc national Wood Buffalo en 1999. La population sauvage établie en Floride a besoin d'être augmentée à au moins 100 individus et d'obtenir du succès quant à la reproduction. En 1999, deux couples ont pondu des oeufs, cependant, aucun de ceux-ci n'a éclos en raison de la prédation et des inondations. La possibilité d'établir une deuxième bande sauvage, soit une bande migratrice dont les aires de reproduction se situeraient dans le Wisconsin, est présentement examinée. Des scientifiques des deux côtés de la frontière font présentement des essais à l'aide de camions et d'avions ultra-légers afin d'enseigner aux Grues nées en captivité le comportement migrateur qu'ils auraient appris en temps normal avec leurs parents.



Photo: Brian Johns, SCF

Pour signaler l'observation de Grues blanches ou pour obtenir de plus amples renseignements

Un réseau d'amateurs partout au Canada et aux États-Unis fait état des observations des Grues blanches aperçues à chaque printemps et à chaque automne le long de la voie de migration, ce qui aide les agents responsables à se tenir au courant du nombre de Grues. Le numéro de téléphone au Canada est le 306.975.5595. Aux États-Unis, les Grues observées au Texas peuvent être signalées au 361.286.3559, et dans les autres États au 308.382.6468.

Pour de plus amples renseignements au sujet du rétablissement des espèces en péril, veuillez composer le

1.800.668.6767

ou visiter notre site Web à l'adresse

www.cws-scf.ec.gc.ca/lpep



16 Whooping Cranes



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On the Internet

http://www.cws-scf.ec.gc.ca/es/endan_e.html

Canadian Wildlife Service

The Canadian Wildlife Service handles wildlife matters that are the responsibility of the Canadian government. These include protection and management of migratory birds as well as nationally significant wildlife habitat. Other responsibilities are endangered species, control of international trade in endangered species, and research on wildlife issues of national importance. The service cooperates with the provinces, territories, Parks Canada, and other federal agencies in wildlife research and management.

For more information about the Canadian Wildlife Service or its other publications, please contact:

Publications
Canadian Wildlife Service
Environment Canada
Ottawa, Ontario K1A 0H3
(819) 997-1095 (phone)
(819) 997-2756 (fax)
cws-scf@ec.gc.ca



Address for access to the Hinterland Who's Who on the Internet: <http://www.cws-scf.ec.gc.ca>

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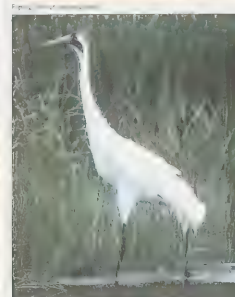
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Hinterland Who's Who

Endangered species in Canada



Peregrine Falcon (not threatened)



Whooping Crane (endangered)



Swift fox (endangered)



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A member of the Environmental Conservation family

Canada

Extinction — the eradication of a species — has been a biological reality ever since life on Earth began some 3.5 billion years ago. Indeed, some scientists have concluded that 95 percent of all the species that have ever existed on Earth are now extinct. If extinction is the result of a natural process, why should Canadians be concerned about the disappearance of various species of wildlife today?

In the modern world, species extinction is alarming not because it happens, but because it is happening much faster due to human activities. The exploding world human population, to meet its own needs, destroys and harms wildlife habitats — those essential places where animals, plants, insects, and other life forms find food, shelter from predators, breeding sites, and other requirements for survival. The result is population declines for some species and extinction for others.

Why should Canadians care?

The highest rates of species extinction are occurring in countries with much higher population densities than Canada and in the tropical rain forests, which are being cleared very rapidly. However, Canadians should not be complacent.

In Canada, since the arrival of the first European settlers, at least 10 animal species and at least one caribou population have become extinct, and an additional 15 species or populations are no longer found in this country. As of 1999, 162 species, subspecies, or populations of wild plants and animals were listed as threatened or endangered, and 151 were considered vulnerable (see table).

One reason that we care about species extinction is that we have a moral responsibility for the Earth's biological heritage. Another is that wild plants and animals are important sources of the basic ingredients of pharmaceuticals and traditional medicines. And the gene pool of the world's wild species still supplies the raw material for improving livestock and crops.

At well, many Canadians, especially aboriginal peoples, rely on renewable resources such as wildlife for food, clothing, and shelter. Others depend on income generated from wildlife-related activities such as hunting, fishing, trapping, lumbering, and bird-watching. In 1996, Canadians spent \$11.0 billion enjoying the wildlife and natural areas in which they live during a variety of nature-related activities. Their outlays for accommodation, transportation, food, and

equipment contributed significantly to Canada's Gross Domestic Product.

Most importantly, the world's plants, animals, and microorganisms play an essential role in the processes that maintain the Earth's atmosphere, climate, landscapes, and water in a state that allows human civilization to prosper. Most basic of all are the plants that capture carbon and solar energy, and the decomposers that release the nutrients and energy in dead plant litter for reuse. Loss of species impairs the Earth's ability to provide these services on which people and economic prosperity depend.

Habitat destruction and our modern lifestyle

In the early twentieth century, Canada's beavers were endangered because of market demand for beaver hats. Conservation programs were unknown at that time, but fortunately for *Castor canadensis*, men's fashions changed before the beavers were completely trapped out. And in the 1930s, governments closed the trapping season and reintroduced beaver in areas that had been stripped by trappers. Then beaver populations recovered, as their habitat had not been damaged.

Today, Canada's wild animals and plants face new perils more subtle than the gun or the trap and more difficult to control — namely, habitat destruction and environmental contamination. Without habitat there is no wildlife.

Across Canada, some types of habitats are vanishing — fast. Wetlands have been filled in, forests have been fragmented, grasslands have been ploughed under and fenced off, and fast-flowing rivers have been slowed. The losses of habitats are clustered largely in southern Canada because the greatest diversity is found there, and pressure for development is also the highest.

The loss and degradation of wetlands is particularly serious. Millions of hectares of marshes, swamps, and other wetlands — extremely important habitats for waterfowl, fish, and many other species — have already been destroyed. Approximately 60 percent of the species designated by the Committee on the Status of Endangered Wildlife in Canada as at risk of extinction are associated with wetlands, and about 80% are threatened by habitat problems.

Canada's modern lifestyle, with its heavy dependence on industrial, household, and agricultural chemicals, also poses a serious

risk to wildlife species. In 1995, the use of the insecticide Carbofuran was restricted after it was proven that it had detrimental effects on the endangered Burrowing Owl.

Modern society puts species in jeopardy in even more ways. Acid rain, for example, can kill pond and other aquatic life and has a negative effect on soils and forest growth. Some wildlife biologists already believe that acid rain and ultraviolet radiation are at least partial culprits in the population declines of some species of waterfowl and amphibians. Scientists are also trying to predict the effects climate change might have on species and habitats.

Another problem is "invasive" species. Invasives comprise those few of Canada's "exotic" (not native to North America) species that have the ability to compete with and replace native wild species.

Invasives are a risk factor for many native Canadian species. In southern Ontario white mulberry, introduced from China for silk manufacture, hybridizes with the red mulberry and threatens the latter's survival as a separate species; in Saskatchewan leafy spurge, which came from Europe accidentally, and smooth brome grass, which was introduced from Europe for forage production and erosion control, are impinging on western sparrowwort plants, which are threatened, on southern Vancouver Island Scotch broom, which was brought from Europe by gardeners, is taking over the habitat of native forbs, many of which have been designated at risk.

Who decides which species are at risk?

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) is responsible for assessing the status of wild species at risk in Canada. Established in 1978, COSEWIC comprises members from federal, provincial, and territorial government wildlife agencies, three national conservation organizations, and chairs of groups of specialists. Members of these groups are wildlife experts who assess scientific status reports on species suspected of being at risk and may then assign species to one of five categories:

EXTINCT species no longer exist.

EXTIRPATED species no longer exist in the wild in Canada, but they occur elsewhere.

ENDANGERED species are facing imminent extinction or extirpation.

Species* at risk in Canada (1999)

Status	Birds	Terrestrial mammals	Marine mammals	Fish	Amphibians & reptiles	Molluscs	Lepidoptera (butterflies & moths)	Plants	Lichens & mosses	Totals
Extinct	7	1	1	6	0	3	0	0	0	12
Extirpated	1	1	1	1	1	1	3	2	1	15
Endangered	1	1	1	1	1	4	1	40	1	67
Threatened	1	1	1	1	1	1	1	30	1	77
At risk	1	1	1	1	1	1	1	39	3	111
Total	11	5	5	12	4	10	6	111	5	167

Note: COSEWIC has reported on 512 species up to 1994. 12 are now extinct, 32 are at risk of extinction, 136 were declared not at risk, 12 that were originally found to be at risk have been delisted, and 24 are unclassifiable due to lack of information. Hundreds more species still await the attention of researchers.

*In addition to referring to taxonomically distinct species, the term "species" as used by COSEWIC includes some subspecies and populations.

†The number includes the 12 species that are already extinct.

THREATENED species are likely to become endangered in Canada if limiting factors are not reversed.

VULNERABLE species are of special concern because of characteristics that make them particularly sensitive to human activities or natural events.

Are there any laws?

At the moment, five Canadian provinces — Nova Scotia, New Brunswick, Quebec, Ontario, and Manitoba — have specific legislation to protect species at risk of extinction. Other provinces have amended existing laws to deal explicitly with endangered species. The federal government is developing legislation on species at risk to protect the species that it is responsible for, such as migratory birds, species on federal lands or waters, fish, and marine mammals. As well, the federal, provincial, and territorial governments have agreed in principle to the "Accord for the Protection of Species at Risk in Canada," which commits governments to ensure that their endangered species legislation and programs complement those of other jurisdictions throughout Canada and provide the protection that species need.

Canada was one of the first industrialized nations to sign the international *Convention on Biological Diversity* at the Earth Summit in Brazil in 1992. By doing so, Canada affirmed its commitment to the conservation of biodiversity and endangered species.

The *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES) regulates trade over

corporations, and private individuals — are effectively coordinated.

Between 1988 and 1998, under RENEW's umbrella, over 100 federal, provincial, and territorial government agencies and nongovernmental organizations contributed over \$27 million to recovery programs for 50 species. Over \$3.6 million of that total was paid directly out of the Endangered Species Recovery Fund (ESRF), which is jointly funded by the Canadian Wildlife Service and World Wildlife Fund Canada, and another \$5 million was paid by ESRF partner

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Examples of successful recovery programs

Whooping Crane

In 1941, there were only 21 wild Whooping Cranes left in all the world. Nonetheless, the Whooping Crane is maintaining its precarious hold on existence — with a lot of help from its friends.

Most of the Whooping Crane's breeding habitat has been destroyed. The birds used to nest along a broad stretching from central Illinois northwest through Iowa, Minnesota, North Dakota, Manitoba, and Saskatchewan into east-central Alberta. Today, their breeding range is six small areas in Wood Buffalo National Park that total 400 square kilometres — not very much land when you consider that each breeding pair requires a territory of up to 5 square kilometres.

In the fall, after a long migration during which the birds have run a gauntlet of power lines, urban centres, and hunters who shoot by mistake, whoopers arrive at

the Aransas National Wildlife Refuge in Texas where, again, their wintering-over territory is greatly diminished and threatened by pollution and oil spills.

In the early 1940s, the National Audubon Society decided to attempt to save the Whooping Crane from extinction. Since then, federal, provincial, state, and private agencies have publicized the plight of the whooper and tried to protect it during migration and at its winter and summer grounds. Wildlife experts also bred it in captivity.

The U.S. and Canadian Whooping Crane recovery teams joined to form a single team in 1996. In winter 1998–99 there were about 364 wild and captive birds, including 183 birds in the original wild flock that breeds in Wood Buffalo National Park. Efforts are also underway to establish additional wild populations that do not breed and winter in the same locations as the main population.

Peregrine Falcon (anatum subspecies)

The Peregrine Falcon is a magnificent bird of prey that was dramatically affected by persistent pesticides, particularly DDT, which caused eggshell thinning. In the years after World War II Peregrine Falcon numbers declined rapidly, almost to the point of extinction in parts of Canada and the United States. Now, thanks to conservation efforts, in particular the reduced use of persistent pesticides and the reintroduction of captive-bred young, the Peregrine Falcon is making a comeback in North America.

The subspecies at greatest risk, the *anatum* Peregrine Falcon, was bred in captivity. Over 1600 were raised at a facility in Wainwright, Alberta, operated by the Canadian Wildlife Service. Birds from this breeding facility were released into the wild by provincial and territorial governments, federal agencies, and public interest organizations across southern Canada. Thanks to the success of the program, captive breeding is no longer necessary, and the facility was recently closed. In 1999, with more than 320 pairs breeding in the wild in Canada, COSEWIC voted to move the subspecies from the endangered to the threatened category to reflect the improved status of the birds. The other two subspecies of Peregrine Falcon that breed in North American — Peale's and Tundra — are classified as vulnerable.

Swift fox

The swift fox is a small, agile mammal, about the size of a housecat, that in the nineteenth century was common on

Canada's southern prairies. In 1978 the swift fox was designated an extirpated species. Its habitat had been lost to farmland, and it had been the unintended victim of trapping and poisoning campaigns aimed at other animals such as coyotes, wolves, and ground squirrels.

The Canadian Wildlife Service working with partners has helped to bring the swift fox back. Foxes obtained from the U.S. were released directly into the wild or bred in captivity to produce offspring that were then released. Some of the foxes are equipped with radio collars so that they can be monitored. Releases have occurred in Alberta and Saskatchewan.

The graceful little animal is now re-established on part of its former territory in Canada. Estimates of the number of swift foxes in the wild in this country range from 179 to 42, and recent studies indicate a slight increase. In 1999, COSEWIC changed the designation of the swift fox from extirpated to endangered.

Piping Plover

The Piping Plover is a small shorebird, found only in North America, that nests on beaches, lakeshores, and river sand bars. Its main range is along the Atlantic coast from southwest Newfoundland to South Carolina, and from the Prairie Provinces to Colorado. The species has been extirpated as a breeding species from the Canadian Great Lakes, but small numbers nest in Michigan.

The Piping Plover went into a serious population decline at the turn of the century because of hunting. It recovered significantly following the implementation of the *Migratory Birds Convention* between Canada and the United States in 1916. Threats to the Piping Plover continue and include predation and human encroachment, mainly disturbance to beaches used for nesting and the effects of water level management along the shores of reservoirs where the species breeds. A recovery plan has been prepared, and in 1996, U.S. and Canadian biologists conducted a census on the plover's known breeding and wintering ranges, finding a total nesting population of 2111 birds in Canada. Slightly more than 40% of the estimated North American breeding population was counted during the wintering range surveys, leading to speculation that there may be important wintering sites that may not have yet been located. Recovery activities include fencing out cattle, which can disturb nesting beaches, fencing of nests to protect the plovers from predators, guardianship programs to reduce the negative effects of all-terrain vehicles and beachgoers on

breeding success, and controlling access to certain breeding areas.

A success story

Human efforts to protect endangered species can be successful.

Twelve species have been delisted, including the White Pelican, which was classified in 1978 in the threatened category by COSEWIC and removed from the list of wildlife at risk in 1987. A colonial nesting bird, the White Pelican has, with a little encouragement from humans, started new colonies and increased in total numbers. In 1988 the status of the wood bison was changed from endangered to threatened, in 1995 the status of the Ferruginous Hawk improved from threatened to vulnerable, and in 1999 the status of the *anatum* subspecies of the Peregrine Falcon was moved from endangered to threatened.

Helping to protect species at risk

In a 1999 survey, 98 percent of Canadians agreed that nature in all its variety is essential to human survival. Individual Canadians can do much to protect wildlife and wildlife habitat that are at risk. Hikers can take care not to disturb birds' nests or pluck rare plants, hunters and fishers can be sure of their game and avoid wastefulness, gardeners can find alternatives to products and species that might harm the environment, and farmers can minimize runoff and erosion and preserve landscape features that shelter wildlife. Above all, Canadians must ensure that economic development does not occur at the expense of the long-term survival of wild plant and animal species. Fortunately, many individuals and organizations are already making a difference, and the federal government is working to support their efforts. Healthy natural systems, rich in wildlife, will help to ensure the social and economic well-being of future generations.

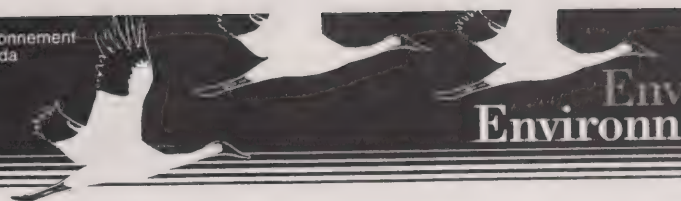
Reading list

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THE SPECIES AT RISK ACT (SARA)

A Guide





THE SPECIES AT RISK ACT (SARA)

A Guide




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For more information on Canada's Strategy to Protect Species at Risk, please visit Environment Canada's web site at: www.ec.gc.ca or call 1 800 668-6767.

Aussi disponible en français.



MINISTER'S MESSAGE

From the lush Pacific coast to the rugged shores of Newfoundland, across the vast Prairies to the far reaches of the Arctic, Canada is blessed with an incredible variety of landscapes that support a rich diversity of species. Each region of the country hosts many diverse ecosystems that sustain thousands of species of plants, mammals, insects, reptiles, amphibians, molluscs, fish and birds.

Ensuring the continued presence of these species is at the heart of a long and comprehensive effort that has culminated in the proposed Species at Risk Act. This legislation helps fulfill commitments we have made to Canadians and to the rest of the world. As part of a three-part strategy on species at risk, the proposed Species at Risk Act complements the other two components: effective stewardship that empowers each of us to act; and the Accord for the Protection of Species at Risk that unifies the efforts of provinces, territories and the Government of Canada on this issue.

This guide to the proposed Species at Risk Act sets out, in plain language, the various components of the legislation. I encourage you to seek additional information on stewardship and the Accord by consulting Environment Canada's web site, the Green Lane, at www.ec.gc.ca. This three-part strategy will help the Government of Canada ensure that Canada remains a leader in the protection of all species.

The Honourable David Anderson
Minister of the Environment



INTRODUCTION

Canada is home to at least 70,000 known species, many of which are found only in Canada. If nature takes its course, one species would disappear about every 1,000 years. However, species are disappearing from the world, and from Canada, at rates much faster than that.

In 1992, Canada signed and then became the first industrialized country to ratify the United Nations Convention on Biological Diversity. That Convention included a commitment for legislation and/or regulatory provisions for the protection of threatened and endangered species. In 1996, the Government of Canada joined with provinces and territories in supporting the Accord for the Protection of Species at Risk. The Accord commits all of Canada's jurisdictions to establishing complementary legislation and programs that provide for effective protection of species at risk throughout the country.

In the 1999 Speech from the Throne, the Government committed to introducing a new Species at Risk Act (SARA or the Act) and complementary stewardship programs as one of its environmental priorities for the new millennium.

This Act is the result of more than six years of dialogue among governments, Aboriginal peoples, landowners, environmental groups, scientists, farmers, fishing interests, the resource industries and individual Canadians.

The Situation Today

To date, 340 species of wildlife (including populations or subspecies) have been classified as being at risk in Canada by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). Of these, 12 are now extinct; 15 more have been extirpated (lost from the wild in Canada); 87 are endangered; 75 threatened; and 151 vulnerable (species of special concern). Of the 97 species that have had their status re-evaluated in recent years, 26 have become more endangered. Scientists tell us that a major reason for species loss is the destruction of habitat required to survive.

The experience of other countries provides additional warning signals. While our record on species decline is better than many other countries, there is no room for complacency. Canada must take appropriate measures now for the protection of endangered or threatened species to ensure they have the best opportunities for survival.



The Species at Risk Act (SARA) at a Glance

This Act has been developed to prevent wildlife species (including birds, plants, fish, reptiles, amphibians, molluscs, mammals and insects) from becoming extinct or lost from the wild and to secure their recovery. It covers all wildlife species at risk nationally, their critical habitats and applies to all lands in Canada.

SARA, and complementary provincial and territorial legislation as provided for under the Accord for the Protection of Species at Risk, will protect species everywhere in Canada.

Responsibility for SARA falls to the: 1) the Minister of Fisheries and Oceans for aquatic species; 2) the Minister of Heritage for species in national parks, national historic sites and other protected heritage areas; and 3) the Minister of the Environment for all other species and for the overall administration of the Act.

SARA will also:

- provide for a rigorous scientific and expert process, operating at arm's length from the federal government, to assess the status of wildlife species;
- prohibit the killing of extirpated, endangered or threatened species and the destruction of their residences;
- provide authority to prohibit the destruction of critical habitat anywhere in Canada;
- provide emergency authority to list species that are in imminent danger;
- provide emergency authority to prohibit destruction of critical habitat of a listed wildlife species in imminent danger;
- provide funding and incentives for conservation and stewardship action;
- create the mechanisms and powers to help species recover; and
- provide for compensation where it is deemed necessary.

SARA Is One Part of a Three-Part Strategy to Protect Species at Risk

The Government of Canada's strategy reflects the different roles of government, Aboriginal peoples, ranchers, conservation groups, fishing interests, resource industries and individual Canadians. The three-part strategy involves:

- building on the Accord for the Protection of Species at Risk, a federal/provincial/territorial agreement;
- stewardship and incentive programs; and
- a new Species at Risk Act (SARA).



Working in Partnership


The protection of wildlife species is a joint responsibility shared by the federal, provincial and territorial governments and all Canadians. Wildlife management boards established under Aboriginal land claims agreements also have responsibilities.

In 1996, federal, provincial and territorial ministers responsible for wildlife supported the creation of the Accord for the Protection of Species at Risk. Under that Accord, the ministers agreed to basic principles of species conservation. They also agreed to co-ordinate their activities through a new Canadian Endangered Species Conservation Council (the Council), which includes the federal ministers of Environment, Fisheries and Oceans, and Heritage as well as the provincial and territorial ministers with responsibilities for wildlife.

Besides partnerships with various levels of government, the federal government also seeks to maximize partnerships with Aboriginal peoples, landowners, farmers, fishing interests, scientists, environmental organizations, individuals, businesses and industries as the most effective way to take action to protect species at risk.

Specific examples of partnership include:

- stewardship activity on private, provincial crown, municipal and Aboriginal lands will be promoted through conservation agreements implemented and funded through SARA. The Act recognizes that the protection of species at risk and their critical habitats directly affects landowners and land users, and therefore includes a fair and balanced approach that will use voluntary stewardship, including funding, as the primary way to engage rural Canadians;
- aboriginal peoples, including wildlife management boards established under land claims agreements, will play an essential role in the conservation of wildlife in Canada;
- ongoing habitat conservation efforts of landowners, resource users, conservation groups, provincial and territorial governments and Aboriginal peoples will be integral to the stewardship program, one part of the Government's three-part strategy; and
- under SARA, recovery planning will be prepared in consultation with the government of any other country in which the species is found.



*This guide gives an overview of the
proposed Species at Risk Act.
It is structured to follow the framework of the legislation.*

SCIENCE-BASED SPECIES ASSESSMENT AND THE LISTING PROCESS


This Act will provide, for the first time, the legal basis for the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). COSEWIC will be composed of qualified wildlife experts drawn from the provincial, territorial and federal governments, wildlife management boards, Aboriginal groups, universities, museums, national non-government organizations and others with expertise in the conservation of wildlife species in Canada. COSEWIC members will be appointed by the Minister of the Environment after consultation with the Council and appropriate experts. COSEWIC will report to the Canadian Endangered Species Conservation Council.

COSEWIC will continue to operate at arm's length from governments in an open and transparent process, maintaining impartial scientific and expert judgment in its assessment process. COSEWIC members will assess the status of wildlife species based on the best available information, including scientific, community and Aboriginal traditional knowledge. COSEWIC will classify wildlife species as being extinct, extirpated, endangered, threatened, or species of special concern. COSEWIC's

assessments of the status of species will be forwarded to the Minister of the Environment and the Council, and made public through the public registry.

IN BRIEF

- *The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) will be given legal status and continue to operate at arm's length from governments, assessing and classifying the status of wildlife species using the best available information, including scientific, community and Aboriginal traditional knowledge.*
- *COSEWIC's assessments of wildlife species will be published and provided to the Minister of the Environment and the Canadian Endangered Species Conservation Council.*
- *COSEWIC's assessments will form the basis for the Minister of the Environment's recommendation to the Governor-in-Council that a species be added to, reclassified or removed from the List of Wildlife Species at Risk.*

- 
1. **Extinct species:** a wildlife species that no longer exists.
 2. **Extirpated species:** a wildlife species that no longer exists in the wild in Canada, but exists elsewhere in the wild.
 3. **Endangered species:** a wildlife species that is facing imminent extirpation or extinction.
 4. **Threatened species:** a wildlife species that is likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction.
 5. **Species of special concern:** a wildlife species that is of special concern because it is particularly sensitive to human activities or natural events, but is not an extirpated, endangered or threatened species.

The COSEWIC scientific assessments will form the basis of the Minister of the Environment's recommendation to the Governor-in-Council for the List of Wildlife Species at Risk. The decision to list a species leads to the use of prohibitions against destroying the species and its residence, and mandatory recovery planning. The decision making process under the proposed Species at Risk Act is transparent and will be accountable to the public. The Minister must report annually to Parliament on COSEWIC's scientific assessments and the responses to each of them.

Emergency Listings

Emergency listings will allow prompt action to be taken when there is evidence that a given species is in rapid decline. If the Minister of the Environment is of the opinion that there is an imminent threat to a species' survival, the Minister will be required to recommend to the Governor in Council that it be listed as endangered on an emergency basis.

Any person who believes there is sufficient evidence to support an emergency listing will be able to submit a request to COSEWIC for assessment, and COSEWIC will be required to submit its assessment to the Minister. An emergency listing will automatically trigger prohibitions that prevent the destruction of a species or its residence.



Reassessment of Existing COSEWIC List

COSEWIC has assessed the status of a number of wildlife species over the last 22 years and enjoys widespread public support for its efforts and assessments. Some people, however, believe that the assessment criteria used in the past were too subjective. There is now broad agreement on new, more refined assessment criteria adopted by COSEWIC and based on the International Union of the Conservation of Nature criteria.

COSEWIC is in the process of reassessing the extirpated, threatened and endangered species on its current list against the new criteria. It is also important to update status information, since some of the species have not been re-examined for many years. Under the Act, COSEWIC will be required to consider community knowledge and Aboriginal traditional knowledge in making its assessments and for most of the existing list, this has not been done.

It is expected that the vast majority of these reassessments will be completed before SARA is proclaimed. The purpose is simply to update the existing COSEWIC list according to the new international criteria.

Within 30 days of proclamation of the legislation, COSEWIC will report its reassessments of the extirpated, endangered and threatened species to the public, the Minister of the Environment and the Canadian Endangered Species Conservation Council. The timeline for submitting its reassessments to the Minister may be extended for the small number of species for which COSEWIC does not have sufficient information to classify. The Minister of the Environment will have the authority to recommend to the Governor-in-Council the List of Wildlife Species at Risk, taking into account the COSEWIC reassessments. Species of special concern (vulnerable) on the existing COSEWIC list will also be reassessed, but those in the most danger must be dealt with first.

The Act will cover protection of both species and their habitat.



IMMEDIATE SPECIES PROTECTION

Prohibitions

Governments share responsibility for the protection of species at risk. Federal, provincial and territorial jurisdictions are committed under the Accord to introduce measures that prohibit the killing or harming of threatened or endangered species, the destruction of their residences.

Under SARA, once a species is listed as threatened, endangered or extirpated, prohibitions to prevent that species from being killed or harmed, and its residence from being destroyed, will automatically apply to aquatic species, migratory birds and species on federal lands. For all other species on provincial crown or private lands, or in the territories, if the Minister of the Environment is of the opinion that the listed species is not protected by provincial or territorial legislation or regulation, the Minister must recommend to the Governor-in-Council that an order be issued to put such prohibitions in place.

Emergency Orders

Under the Act, the Minister responsible for management of the species must recommend to the Governor-in-Council that an emergency order be issued to prohibit activities that may adversely affect the species and its habitat when he or she is of the opinion that a listed wildlife species is facing imminent threats to its survival or recovery. Emergency listings and orders will be fast-tracked.

Exceptions

SARA will provide for exceptions to prohibitions in cases of public health, safety or national security, or for activities in accordance with regulatory or conservation measures for wildlife species under a land claims agreement.

Agreements, permits and licences will authorize a person to engage in an activity affecting a listed wildlife species or any part of its critical habitat if the activity benefits the species or is required to enhance its chances of survival in the wild, or if affecting the species is incidental to the carrying out of the activity, for instance bycatch in fishing. Nevertheless, the activity must not jeopardize the survival or recovery of the species.



Project Review

Environment assessments for projects that are required by an Act of Parliament will have to take into account the project's effects on listed wildlife species and their critical habitats. Measures must be taken to avoid or lessen those effects, and to monitor the results.

Under the Canadian Environmental Assessment Act, the definition of "environmental effect" will be amended to include a listed species, its critical habitat, or its residence as defined in SARA.

Compliance and Enforcement


Enforcement will be done in close co-operation with federal, provincial, territorial and local enforcement agencies. Officials will ensure compliance with the Act through inspections, monitoring, investigations and prosecutions.

Violations of the Act will be statutory offences that will carry stiff penalties. The courts will also have the option of imposing community service or fines to pay for remedial measures.

RECOVERY AND MANAGEMENT PLANNING

Under the Act, once a wildlife species has been listed as endangered or threatened, recovery strategies and action plans must be developed in partnership with the provinces and territories, wildlife management boards, Aboriginal organizations, landowners, universities, industry, resource users, environmental groups and other appropriate individuals. Recovery strategies must be produced within one year of listing for endangered species and two years of listing for threatened species. These strategies can be prepared using a multi-species or an ecosystem approach.

Recovery strategies will provide baseline scientific information and identify any threats to the survival of the species, including loss of habitat. The strategies will build on the information provided by COSEWIC and describe a broad strategy --including timelines--to address those threats. Recovery strategies will identify as much critical habitat as is possible and, if necessary, that identification will continue



during the action planning process. Action plans will include measures to be taken to implement recovery strategies and when they are to take place. They will also include an evaluation of the socio-economic costs and the benefits to be derived from implementation. In addition to the annual report to Parliament by the Minister of the Environment, the Minister with responsibility for management of the species will monitor and report on recovery strategy and action plan implementation every five years.

Recovery strategies and action plans will be two parts of an overall integrated and flexible recovery planning process. Flexibility is essential as new information learned may change the approach to the recovery of a species or the priority of actions to be taken. Actions to recover species can take place at any time in the process, when the best available information warrants it. If need be, interim habitat protection will also be available. When there is evidence of imminent threats to a species' survival or recovery, emergency authority allows prompt action to be taken.

Management plans will be prepared for conserving species of special concern and their habitat within three years of listing. These plans could adopt a multi-species or an ecosystem approach and will be prepared in partnership with the provinces, territories, wildlife management boards, Aboriginal organizations, landowners, universities, industry, environmental groups and other appropriate individuals.


Stewardship

SARA will provide for conservation agreements with any government, organization or person for measures to protect species at risk and their critical habitats. This includes conservation agreements to develop and implement recovery strategies, action plans and management plans.

The Act will also provide for conservation agreements to conserve wildlife species that are not at risk, to prevent them from becoming at risk. In addition, SARA will provide for funding agreements for the payment of contributions towards the costs of programs and measures for the conservation of wildlife species.

Critical Habitat Protection

When the recovery process identifies a certain habitat area as critical for a species' survival and recovery, each jurisdiction has a responsibility to protect the identified critical habitat. Stewardship and incentive measures will be the primary and preferred means for protecting critical habitat. Where such measures are impossible or not feasible, each jurisdiction, using legislation or regulation, must protect the critical habitat. The federal government will protect critical habitat on



federal land, and the provinces and territories will protect critical habitat within their borders.

When not protected by the provinces or territories, the Minister must recommend to the Governor-in-Council that an order be issued to prohibit destruction of any designated critical habitat of a threatened or endangered species that is in a province or territory. Authority to invoke the prohibition on provincial or private lands is rooted in the Government of Canada's constitutional authority called the "criminal law power".


The Minister of the Environment must report in the public registry on steps taken to protect critical habitat within 180 days after the recovery strategy or action plan that identified the critical habitat becomes effective. Further updates will be provided every 180 days until the critical habitat is protected or is no longer identified as critical habitat.

Compensation

Protecting species is everyone's responsibility. The Act will enable compensation to be paid to individuals, organizations, Aboriginal peoples or businesses for losses suffered as a result of any extraordinary or unfair impact when it is necessary to prohibit destruction of critical habitat. The legislative authority to provide compensation, following the use of the critical habitat prohibition, will be implemented through regulations. The Government will work with interested parties to develop the regulations governing the principles for a compensation regime over the next several months.

PUBLIC INVOLVEMENT AND CITIZEN ACTION

The Government of Canada is committed to working with all Canadians to ensure that species at risk and their critical habitats are protected. SARA includes a number of processes designed to prevent disputes from arising. Public notice and stakeholder consultation will be a fundamental component of the Act, promoting transparency and providing for public input into decision making. In the event of a dispute, the federal government will work collaboratively with Canadians to resolve disagreements in a timely manner.



Under the Act, the public will have access through a public registry to documents relating to SARA, including:


- COSEWIC's criteria for the classification of wildlife species;
- status reports on wildlife species;
- COSEWIC's assessments of the classification of wildlife species;
- the List of Wildlife Species at Risk;
- recovery strategies, action plans and management plans; and
- regulations and orders made under SARA.

Citizens will also have a right to:

- apply to have the status of a species assessed or reassessed by COSEWIC;
- comment on recovery strategies prior to their approval; and
- apply for an investigation into an alleged offence under the Act.

Review of the Act

The Act will be reviewed five years after it comes into force.



GLOSSARY OF TERMS

Action plan: a document that includes the measures to be taken to implement recovery strategies and when they are to take place.

Canadian Endangered Species Conservation Council (the Council): comprises federal, provincial and territorial ministers responsible for the protection of species at risk.

COSEWIC: the Committee on the Status of Endangered Wildlife in Canada is an arm's length body composed of wildlife scientists and experts from across the country. COSEWIC determines the level of risk of extinction for a species and classifies them into categories based on level of risk. These determinations are based on biological factors using rigorous assessment criteria.

Critical habitat: habitat that is necessary for the survival or recovery of a listed wildlife species.

Endangered species: a wildlife species that is facing imminent extirpation or extinction.

Extinct species: a wildlife species that no longer exists.

Extirpated species: a wildlife species that no longer exists in the wild in Canada, but exists elsewhere in the wild.

Individual: an individual of a wildlife species at any development stage, whether living or dead, including embryos, eggs, sperm, pollen, seeds and spores.

Management plan: a document that describes the measures to be taken to conserve a listed species of special concern and its habitat.

Recovery strategy: a document that identifies any threats to the survival of a species (including any loss of habitat) listed as extirpated, endangered or threatened on the List of Wildlife Species at Risk. The document describes a broad strategy to be taken--including timelines--to address the threats to a species.

Residence: the specific dwelling-place, such as a den, nest, or other similar area, place or structure, that is occupied or habitually occupied by one or more individuals during all or part of their life cycles, including breeding, rearing or hibernating.



Species at risk: an extirpated, endangered or threatened species or a species of special concern.

Status report: a report containing a summary of the best available information on the status of a wildlife species, including scientific, community and Aboriginal traditional knowledge.

Species of special concern: a wildlife species that is of special concern because it is particularly sensitive to human activities or natural events, but is not an extirpated, endangered or threatened species.

Threatened species: a wildlife species that is likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction.

Wildlife species: a species, subspecies or biologically distinct population of animal, plant or other organism, other than a bacteria or virus, that is wild by nature and is native to Canada or has extended its range into Canada without human intervention and has been present in Canada for at least 50 years.

